

WHAT IS CLAIMED IS:

1. An accelerated database system comprising:
a persistent storage device configured for continuous storage of a table of data;
a volatile storage database system comprising a processor and a volatile main memory, said volatile storage database system is configured for concurrent storage and high-speed retrieval of said table of data; and
a database server in communication with said persistent storage device and said volatile storage database system, said database server is configured to receive a database write command and send a corresponding write command to said persistent storage device and to said volatile storage database system, and is additionally configured to receive a database read command requesting data and to retrieve the requested data from said volatile storage database system.
2. The system of Claim 1, wherein said volatile storage database system comprises a plurality of processors, wherein each processor communicates with each other processor for distributing said database write command among the processors and for returning results data from said database read command.
3. The system of Claim 1, further comprising a client computer system in communication with said database server, wherein said client computer system is configured to generate said database read command and said database write command in response to a user action and transmit said database read command and said database write command to said database server.
4. The system of Claim 1, wherein said persistent data storage device is a hard disk drive.
5. The system of Claim 1, wherein said database server is a standard query language (SQL) compliant database server.
6. The system of Claim 1, wherein said volatile storage database system comprises random access memory for storage of said table of data associated with said database write command.
7. The system of Claim 1, wherein said database read command and said database write command comprise a name of said table of data, and wherein said name

comprises a prefix that designates a destination of said database read command and said database write command to either said persistent data storage device or said volatile storage database system.

8. The system of Claim 1, wherein said processor is configured to perform commit processing by maintaining a list of changes to said table of data and further configured to perform rollback processing by undoing said list of changes.

9. The system of Claim 1, wherein said database server is configured to send said corresponding write command only to said volatile storage database system.

10. The system of Claim 1, wherein said database server is configured to send said corresponding write command only to said persistent storage device.

11. A cooperative database server system for distributing a database write command to a persistent storage device and to a volatile storage database system, and for distributing a database read command to the volatile storage database system, the system comprising:

- a network interface processing module configured to receive a database command via a network and transmit data related to said database command over said network, wherein said database command comprises a read command and a write command, and wherein said read command and write command comprise a database table name;

- a trigger processing module configured to receive said write command and generate a trigger in response to said write command, wherein said trigger comprises execution of instructions that transmit said write command to a persistent storage device and to a volatile storage database system; and

- a views processing module configured to receive said read command and direct said read command to said volatile storage database system.

12. The system of Claim 11, further comprising a commit/rollback processing module configured to:

- commit a modification to a database record by accepting said modification to said database record; and

undo said modification to said database record by restoring said database record to its previous contents.

13. The system of Claim 12, wherein said commit/rollback processing module is further configured to lock said database record during said modification of said database record.

14. The system of Claim 13, wherein said lock of said database record is released upon completion of said modification of said database record.

15. The system of Claim 11, further comprising a primary node interface processing module in communication with said volatile storage database system and configured to transmit said database command to said volatile storage database system and receive data from said volatile storage database system in response to said read database command.

16. The server system of Claim 11, further comprising a database command processing module configured to receive said database command from said network interface processing module and generate a corresponding database server command from said database command.

17. The system of Claim 11, wherein said trigger processing module is further configured to transmit said write command in a batch processing mode.

18. The system of Claim 11, wherein directing said read command is to either said persistent storage device or to said volatile storage database system according to said database table name.

19. The system of Claim 11, wherein said trigger comprises execution of instructions that transmit said write command to said persistent storage device and to said volatile storage database system at different times.

20. A method of storing and retrieving a table of data from an accelerated database system, the method comprising:

storing a table of data on a persistent storage device, said persistent storage device is configured for continuous storage of said table of data;

storing said table of data concurrently on a volatile storage database system, said volatile storage database system is configured for storage and high-speed retrieval of said table of data;

receiving a database write command and sending a corresponding write command to said persistent storage device and to said volatile storage database system;

receiving a database read command requesting data; and

retrieving the requested data from said volatile storage database system.

21. The method of Claim 20, further comprising distributing said database write command among a plurality of processors of said volatile storage database system.

22. The method of Claim 20, further comprising returning results data from said database read command.

23. The method of Claim 20, further comprising generating said database read command and said database write command in response to a user action and transmitting said database read command and said database write command via a network.

24. The system of Claim 20, wherein said persistent data storage device is a hard disk drive.

25. The system of Claim 20, wherein said database read command and said database write command are standard query language (SQL) compliant commands.

26. The system of Claim 20, wherein said volatile storage database system comprises random access memory for storage of said table of data associated with said database write command.

27. The system of Claim 20, wherein said database read command and said database write command comprise a name of said table of data, and wherein said name comprises a prefix that designates a destination of said database read command and said database write command to either said persistent data storage device or said volatile storage database system.

28. The system of Claim 20, wherein storing said table of data on said volatile storage database system is performed at a different time than storing said table of data on said persistent storage device.

29. The system of Claim 20, wherein sending said corresponding write command to said persistent storage device and to said volatile storage database system are performed at different times.

30. A method of distributing a database write command to a persistent storage device and to a volatile storage database system and distributing a database read command to the volatile storage database system, the method comprising:

- receiving a database command via a network, wherein said database command comprises a read command and a write command, and wherein said read command and said write command comprise a database table name;

- transmitting data related to said database command over said network;

- receiving said write command;

- generating a trigger in response to said write command, wherein said trigger comprises execution of instructions that cause a persistent storage device and a volatile storage database system to be updated according to said database table name and said data related to said database command;

- receiving said read command; and

- directing said read command to said volatile storage database system.

31. The method of Claim 30, further comprising:

- committing a modification to a database record by accepting said modification to said database record; and

- undoing said modification to said database record by restoring said database record to its previous contents.

32. The method of Claim 31, further comprising locking said database record during said modification of said database record.

33. The method of Claim 32, further comprising unlocking said database record upon completion of said modification of said database record.

34. The method of Claim 30, further comprising receiving results data from said volatile storage database system in response to said read command.

35. The system of Claim 30, wherein said transmitting of said write command is performed in a batch processing mode.

36. The system of Claim 30, wherein directing said read command is to either said persistent storage device or to said volatile storage database system according to said database table name.

37. The system of Claim 30, wherein said transmitting said write command to said persistent storage device and to said volatile storage database system are performed at different times.